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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,052	05/31/2001	Robert S. Matson	1810A-045 (81841.0192)	8141

26021 7590 08/13/2003  
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EXAMINER

LAM, ANN Y

ART UNIT	PAPER NUMBER
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1641

DATE MAILED: 08/13/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/872,052

Applicant(s)

MATSON ET AL.

Examiner

Ann Y. Lam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on September 23, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 55-71 is/are pending in the application.
- 4a) Of the above claim(s) 28-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 55-71 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed May 31, 2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. (More specifically, the document listed under "OTHER DOCUMENTS" has not been considered because the document was not found in the file.)

### ***Election/Restrictions***

Applicant's election with traverse of the restriction requirement in Paper No. 5 is acknowledged. Applicant did not state particular reasons for the traversal.

The requirement is still deemed proper and is therefore made FINAL.

Furthermore, Examiner notes that claims 1-27 are cancelled, as intended by Applicant in Paper No. 5.

### ***Claim Objections***

Claims 56 and 62 are objected to because of the following informalities: in claim 56, "bioploymer" in line 1 is misspelled, and should be --biopolymer; in claim 62, "suppot" is misspelled and should be --support. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 63 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 63, the phrase "like structures" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "like structures"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 55-71 are rejected under 35 U.S.C. 102(e) as being anticipated by Milton, 6,110,669.

Milton disclose a plurality of biopolymer and a solid support (see column 3, lines 41-52), wherein the solid support has at least one surface comprising pendant acyl fluoride functionalities (see column 3, lines 41-52), and wherein the biopolymer is attached to the solid support by reaction with the pendant acyl fluoride functionalities (see column 3, lines 25-28.)

As to claim 56, the biopolymers are nucleic acids (see column 25, lines 65-67.)

As to claims 57 and 58, the biopolymers are polynucleotides (see column 21, lines 39-44.)

As to claim 59, the polynucleotide is single or double stranded DNA (see column 25, lines 65-67.)

As to claims 60 and 71, the biopolymers may be the same or different.

As to claim 61, the solid support is of polymeric materials (see column 6, lines 19-20.)

As to claim 62, the solid support is ethylene-acrylic acid copolymer (see column 3, lines 24-28.)

As to claim 63, the solid support is the form of films (see column 2, line 15.)

As to claim 64, the solid support is fabricated from plastic in the form of a planar device having discrete isolated areas in the form of hydrophobic or hydrophilic patches (see column 6, lines 22-26 and lines 32-36.)

As to claim 65, the solid support is a microplate (see column 6, lines 26-36.)

As to claim 66, the plastic is a surface treated with acyl fluoride functionalities (see column 3, line 27, and lines 53-61.)

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As to claim 67, the plastic is polypropylene (see column 2, lines 15-18.)

As to claims 68-70, the biopolymers are attached to different, discrete, isolated areas to form an array (see column 6, lines 17-36.)

2. Claims 55-61 and 63-71 are rejected under 35 U.S.C. 102(e) as being anticipated by Obremski et al., 6,110,749.

Obremski et al. disclose a plurality of biopolymer and a solid support (see column 2, lines 63-67), wherein the solid support has at least one surface comprising pendant acyl fluoride functionalities (see column 16, lines 64-67), and wherein the biopolymer is attached to the solid support by reaction with the pendant acyl fluoride functionalities (see column 16, lines 64-67.)

As to claim 56, the biopolymers are nucleic acids (see column 7, lines 39-47.)

As to claims 57 and 58, the biopolymers are polynucleotides (see column 7, lines 39-47.)

As to claim 59, the polynucleotide is single or double stranded DNA (see column 7, lines 39-47.)

As to claims 60 and 71, the biopolymers may be the same or different.

As to claim 61, the solid support is of polymeric materials (see column 16, line 64.)

As to claim 63, the solid support is the form of films (see column 16, line 33.)

As to claim 64, the solid support is fabricated from plastic in the form of a planar device having discrete isolated areas in the form of wells (see column 6, lines 65-66.)

As to claim 65, the solid support is considered a microplate.

As to claim 66, the plastic is a surface treated with acyl fluoride functionalities (see column 16, lines 64-67.)

As to claim 67, the plastic is polypropylene (see column 16, line 64.)

As to claims 68-70, the biopolymers are attached to different, discrete, isolated areas to form an array (see column 2, lines 63-67.)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Y. Lam whose telephone number is (703) 306-5560. The examiner can normally be reached on M-Sat 11-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (703)305-3399. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-4242 for regular communications and (703)308-4426 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0196.

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A.L.

August 10, 2003



LONG V. LE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

08/11/03